

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (currently amended) An ~~modem~~ apparatus comprising:
a base unit for transmitting a data signal for coupling to a telephone line; and
a ~~communication card~~ remote unit ~~which receives the data signal from~~ for
communicating with the base unit over a wireless medium;
wherein the base unit includes a transmitter for modulating a voiceband data signal
received over the telephone line and transmitting the modulated signal over the
wireless medium, and level control circuitry coupled to the transmitter that
controls a level of the voiceband data signal to be substantially in a linear range of
the transmitter; and
wherein the remote unit includes a receiver for receiving the modulated signal over the
wireless medium and demodulating the voiceband signal, and which performs
echo canceling on the data signal and an interface to a modem circuit for decoding
a data stream encoded in the voiceband signal.
2. (cancelled)
3. (cancelled)
4. (currently amended) The ~~modem~~ apparatus of claim 31, wherein the level control
circuitry that controls a level of the signal comprises an automatic gain control circuit that
controls a peak level of the signal.

5. (currently amended) The ~~circuitry~~apparatus of claim 4, wherein the automatic gain control circuit uses a dial tone of a telephone connection or a DC current of a telephone loop to set a gain level for the original signal at a beginning of communication, the gain level remaining substantially constant during communication.

6. (currently amended) The ~~modem~~apparatus of claim 1, wherein the data signal is transmitted over a radio channel using multi-level frequency shift keying (FSK) modulation.

7. (currently amended) The ~~modem~~apparatus of claim 1, wherein the ~~communication card~~remote unit is in communication with the base unit and a computer, the ~~communication card~~remote unit receiving an original voiceband data signal from the computer, generating an RF modulated signal based on the original signal from the computer, and transmitting the RF modulated signal to the base unit.

8. (currently amended) The ~~modem~~apparatus of claim 7, wherein the ~~communication card~~remote unit includes an RF transmitter and an RF receiver, the ~~communication card~~remote unit establishing wireless communication with the base unit, the ~~communication card~~remote unit communicating with the base unit by wireless communication via an RF transmitter and RF receiver, and the communication card remote unit communicating with the computer via a wired link.

9. (currently amended) The ~~modem~~apparatus of claim ~~7~~ 1, wherein the base unit includes a ring detector coupled to the telephone line for detecting a ring signal on the telephone and providing a ring indication signal to the transmitter for transmission over the wireless medium to the remote unit; and

the ~~communication card~~remote unit includes a ringer emulator coupled to the receiver for receiving the ring indication signal; and ~~wherein a low frequency signal generator is used to emulate ringer detection circuits when a ringing signal is detected in the base unit and transmitted over the wireless medium to the communication card,~~ the ringer emulator emulating ringer detection in a ring signal on a telephone interface and feeding a signal to a modem circuit to receive of incoming call.

10. (currently amended) The modem of claim 7, wherein the ~~communication card~~remote unit includes a switch for selecting a type of medium over which to transmit and receive the data signal.

11. (currently amended) A modem comprising:

a base unit; and

a ~~communication card~~remote unit for transmitting data signals to, and receiving data signals from the base unit, the ~~communication card~~remote unit including a switch for selecting a type of medium over which to transmit and receive the data signals between the base unit and the remote unit, and circuitry for triggering the switch in response to detecting the type of medium coupling the base unit and the remote unit.

12. (original) The modem of claim 11, wherein the type of medium comprises a wired medium.

13. (original) The modem of claim 11, wherein the type of medium comprises a wireless medium.

14. (cancelled) ~~The modem of claim 11, further comprising circuitry which triggers the switch in response to detecting a wired medium interface to the modem.~~

15. (currently amended) The modem of claim ~~14~~11, wherein the circuitry comprises a line presence indicator; and

wherein the switch is triggered to operate the modem in wired mode when the line presence indicator detects the wired medium and the switch is triggered to operate the modem in wireless mode when the line presence indicator does not detect the wired medium.

16. (new) A communication interface comprising:

a base unit including an interface for coupling to a telephone line and a transceiver for communicating over a wireless medium, the transceiver including a transmitter for sending signals over the wireless medium and a receiver for accepting signals from the wireless medium; and

a modem interface including a transceiver for communicating with the base unit over the wireless medium and an interface to a modem circuit;

wherein the base unit includes a hybrid circuit for passing voiceband data signals between the telephone line and the transceiver, and includes a gain control circuit for controlling a level of the voiceband data signals passing from the hybrid circuit to the transmitter to be substantially in a linear range of the transmitter.

17. (new) A communication method comprising:

at a base unit,

accepting from a telephone line a voiceband data signal encoding a data stream,

controlling a level of the voiceband data signal to be substantially in a linear range of a transmitter, and

modulating the voiceband data signal for transmission over a wireless medium;

and

at a remote unit,

demodulating the voiceband data signal,

echo canceling the demodulated voiceband data signal to attenuate echoes of signals transmitted from the remote unit to the base unit, and decoding the data stream from the echo cancelled voiceband data signal.

18. (new) The method of claim 17 wherein the base unit passes the voiceband signals between the telephone line and the remote unit without performing echo cancellation on the voiceband signals.

19. (new) The method of claim 17 wherein the base unit introduces at least some echo of a voiceband signals passing from the remote unit into voiceband data signals sent to the remote unit.

20. (new) The apparatus of claim 1 wherein the remote unit further comprises a modem circuit coupled to the remote unit.

21. (new) The apparatus of claim 20 wherein the modem circuit includes an echo canceller for reducing echoes on the demodulated voiceband data signal and a CODEC for decoding the voiceband data signal.